



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,773	04/14/2005	Allen D. Delaney	KINE-040	3141
24353 7590 11/16/2007 BOZICEVIC, FIELD & FRANCIS LLP 1900 UNIVERSITY AVENUE SUITE 200 EAST PALO ALTO, CA 94303			EXAMINER AEDER, SEAN E	
			ART UNIT 1642	PAPER NUMBER
			MAIL DATE 11/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding:

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/509,773

Applicant(s)

DELANEY, ALLEN D.

Examiner

Sean E. Aeder

Art Unit

1642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,12,15-17,28 and 43 is/are pending in the application.
- 4a) Of the above claim(s) 2,7,12,15-17,28 and 43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

***Detailed Action***

The Amendments and Remarks filed 9/20/07 in response to the Office Action of 4/20/07 are acknowledged and have been entered.

Claims 1, 2, 7, 12, 15-17, 28, and 43 are pending.

Claims 2, 7, 12, 15-17, 28, and 43 have been withdrawn.

Claim 1 has been amended by Applicant.

Claim 1 is currently under examination.

The following Office Action contains NEW GROUNDS of rejections necessitated by Amendments.

***Rejections Withdrawn***

The rejection under 25 U.S.C. 112, first paragraph, is withdrawn.

***Response to Arguments***

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 remains rejected under 35 U.S.C. 102(b) as being anticipated by Plowman et al (WO 01/12819 A2; 2/22/01) for the reasons stated in the Office Action of 4/20/07 and for the reasons set-forth below.

Amended claim 1 is drawn to a method of screening for biologically active agents that modulate a cancer associated phosphatase function comprising combining a candidate biologically active agent with a polynucleotide encoded by SEQ ID NO:1 or having the amino acid sequence set-forth in SEQ ID NO:2, wherein said polypeptide has phosphatase activity, determining the effect of said agent on phosphatase function, and assessing the effectiveness of said agent on cancer cells in vitro to identify agents that modulate said phosphatase function.

Plowman et al teaches the polypeptide set-forth as SEQ ID NO:12, which is 100% homologous to instant SEQ ID NO:2 and is encoded by a fragment 100% homologous to instant SEQ ID NO:1 (see attached sequence comparison mailed 4/20/07). Plowman et al further teaches a method of screening for biologically active agents that modulate a cancer associated phosphatase function comprising combining a candidate biologically active agent with a polynucleotide encoded by instant SEQ ID NO:1 or having the amino acid sequence set-forth in instant SEQ ID NO:2, wherein said polypeptide has phosphatase activity, determining the effect of said agent on phosphatase function, and assessing the effectiveness of said agent on cancer cells in vitro to identify agents that modulate said phosphatase function (see pages 6, 8, 27, 28, 58, and 59 in particular).

In the Reply of 9/20/07, Applicant states that the pending claims have been amended to recite determining the effects of the candidate biological active agent on liver or colon cancer. Applicant further argues that Plowman et al does not teach a screening method involving liver or colon cancer.

The amendments to claim 1 and the arguments found in the Reply of 9/20/07 have been carefully considered but are not deemed persuasive. In regards to the statement that the pending claims have been amended to recite determining the effects of the candidate biological active agent on liver or colon cancer, the pending claims have not been amended to recite methods of determining the effects of the candidate biological active agent on liver or colon cancer. In regards to the arguments that Plowman et al does not teach a screening method involving liver or colon cancer, said arguments are not in commensurate with the scope of the claims. The pending claims are not limited to screening methods involving liver or colon cancer.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Amended claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Amended claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. Claim 1 recites a method comprising "...assessing the effectiveness of said agent on cancer cells in vitro" to identify agents that modulate said phosphatase function. However, it is unclear *how* one is to "assess the effectiveness of said agent on cancer cells" or what would be deemed "effective". It is unclear if one is to assess the

Art Unit: 1642

effectiveness of said agent on cancer cells by performing steps to determine whether said agent effectively inhibits particular cancer phenotypes (proliferation, motility, survival), whether one is to perform steps to determine whether said agent is effective at modulating phosphatase function in cancer cells, or something else. See MPEP § 2172.01. The omitted elements are: active method steps involved in assessing a particular type of effectiveness of said agent on cancer cells in vitro.

### ***Summary***

No claim is allowed.

### ***Conclusion***

**Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1642

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E. Aeder, Ph.D. whose telephone number is 571-272-8787. The examiner can normally be reached on M-F: 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shanon Foley can be reached on 571-272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SEA

/Misook Yu/  
Primary Examiner  
Art Unit 1642